

Amendments to the Specification:

Please insert the following header and paragraph on page 1, immediately following the title:

CROSS REFERENCE TO RELATED APPLICATIONS

This is the U.S. National Stage of International Application No. PCT/GB2004/004308, filed October 11, 2004, which was published in English under PCT Article 21(2), which in turn claims the benefit of Great Britain Patent Application No. 0323906.8, filed October 11, 2003. Both applications are incorporated herein in their entirety.

Please replace the paragraph beginning at page 8, line 5, with the following rewritten paragraph:

It will be understood that embodiments of the present invention can be used without the need for specific ~~fighting-lighting~~ lighting sources. Ambient light may be sufficient.

Please replace the paragraph beginning at page 9, line 9, with the following rewritten paragraph:

The peak 41 will be tall and sharp when the yarn is well focused on the CCD array as shown in figure 4(a). However when focusing is less sharp the waveform will be more similar to that illustrated in figure 4(b). However the position of the centre of the peak still indicates the position of the yarn. This allows some tolerance in the positioning of the sensor head with respect to the yarn about the position for best focus. In a typical embodiment the variation of five millimeters on each side of the correct position in front of the focussing optics (at, for example, a focal length of seventy millimetres) is allowable. The output signals illustrated in figure 4 can be made to repeat at a rate of for example 1 kHz. This permits handheld use of the sensor since in a measurement period of one second about one thousand frames can be acquired.

WDN/AJV:kaa 04/10/06 511250 JCB/P108014US
Attorney Reference Number 5585-74840-01
PATENT

Express Mail Label No. EV514206516US
Date of Deposit: April 10, 2006

Please insert the attached Abstract as the last page of the specification.